



Fire Alarm and Detection Standard

A. Purpose: This standard sets forth the requirements for the design, installation, testing, maintenance and monitoring of all fire alarm system installations within South County Fire's (SCF) incorporated response area including those monitoring sprinkler systems.

It is intended to provide consistency between all parties during plan design, submittal, review, installation, inspection and testing of new and existing fire alarm and detection systems.

B. Scope: The information contained within this document details the local amendments to the International Fire and Building Codes, NFPA 72, NFPA 70, Washington Administrative Code and the Revised Code of Washington. The most specific and/or restrictive provision shall apply if conflicts occur between the requirements found in these documents, as determined by the Fire Marshal. Nothing in this document shall prevent the fire code official from modifying these requirements as necessary, based on circumstances, to provide an acceptable level of protection.

C. Design and Installation:

1. When a building is required to be equipped with a fire alarm system, the system shall provide protection throughout the structure or as approved by the fire code official.
2. All fire alarm designers shall provide acceptable proof of competence. This shall be one of the following: A valid State of Washington Professional Electrical, or Fire Protection Engineer's license, OR a valid NICET III, or IV Certification for Fire Alarm Systems.
3. Fire alarm systems shall be installed and maintained by trained and qualified fire alarm technicians. All technicians shall be licensed by the State of Washington and be NICET II certified. All alarm companies and Central Stations shall have a current City Business license.
4. Each initiation device shall report to the Fire Alarm Control Panel (FACP) independently via a separate zone (IDC) on conventional systems or by individual address (SLC) on addressable systems.



5. Systems out of Service - For the first 48 hours, the owner may provide a competent adult to serve as a fire watch. After the initial 48 hours, the fire watch must be provided by a licensed and bonded private security company until the system is returned to full service. The owner must furnish the fire marshal with the name and contact information of the competent adult and/or Security Company within eight hours of implementing a Fire watch.
6. Upon completion of work on a new or modified fire alarm system, it shall be pre-tested by the installing technician and an acceptance test shall be performed in the presence of fire prevention personnel. The request for the acceptance test shall be made via the city's online permit request system within 24 hours after the completion of the work (or will be subject to a \$75.00/day fine)*City of Lynnwood only.
7. Monitoring - All fire alarm systems, fire detection systems, or sprinkler systems shall be monitored by a UL-listed, central station from SCF's approved central station list. Monitoring by other central stations is not allowed. The Central Station monitoring the fire alarm system shall advise the Fire Marshal's office in writing of any disconnection of monitoring a minimum of 10 days prior to the cancellation. Systems out of service and unresolved fire alarms for more than 24 hours shall be reported to the Fire Marshal's Office.
8. All fire alarm system communicators shall be supervised by the FACP.
9. Fire Alarm Control Panels –
 - A. FACP's shall comply with the provisions of NFPA 72 and this Standard. Only fire alarm components shall be connected to the fire alarm control panel.
 - B. There shall be only one FACP allowed per building unless otherwise approved by the fire code official.
 - C. Systems and their components shall be listed and approved for the purpose for which they are installed.
 - D. All new fire alarm systems shall be addressable and each device shall have its own address that shall annunciate to an approved central station.



- E. Fire Alarm Communication Methods – All means of communication between the FACP and the Central Station shall be of a method approved by the Fire Marshal and be provided with a minimum of 24 hours standby power. Only components that are serviceable by a fire alarm technician shall be part of the means of communication located on the protected premises. The Fire Marshal shall maintain a list of approved communication means.
9. Rate of rise heat detectors shall be used in all locations, except where they would initiate false alarms. In these instances, fixed temperature detectors or other devices may be approved.
- Pull Stations (1) are only allowed at the FACP.
10. The installation/upgrade of a FACP shall require all fire alarm components to meet current Fire Alarm Standards. Exception: FACP replacement of the same make and model as the existing panel will be considered as a repair.
11. All fire alarm components shall be UL listed for their intended use. No one shall perform any modifications which would void the UL Listing.
12. Detection shall be provided in all R1 and R2 buildings with common hallways and at the top of stairways.
13. Notification devices shall be installed in existing buildings/suites as to provide audibility and/or visibility as required at the time of a tenant improvement, FACP installation/replacement/upgrade, or a change of use. In addition, at least one A/V device shall be installed on the exterior of the building facing fire department arrival.
14. Smoke detectors and heat detectors (shunt trip) shall be installed at the top of elevator shafts and in elevator machine rooms. Shunt trip heat detectors shall be supervised by the FACP for integrity.
15. A minimum of 24-hours of secondary power shall be provided for all fire alarm control panels, NAC power supplies, transmitters, communicators, etc.



16. The means of communication between the FACP and Central Station shall be approved by the Fire Code Official and be serviceable by the fire alarm technician.
17. FACP's and appropriate peripherals shall meet the requirements in UL864 Standards with the exception that any new panel that has the capability to connect security system devices shall not be allowed.
18. Duct smoke detectors shall be connected to the FACP and report as a supervisory signal.
19. All new FACP's shall be installed in the fire riser room and have signage stating "Fire Alarm" or "Fire Alarm Control Panel" affixed to the outside of the door. Signs shall be Red, with 2" white letters.
20. An approved Knox key box is required to access FACP's and can be ordered at www.knoxbox.com.
21. FACP's shall be located so as to be readily accessible to fire department personnel. All reset procedures shall meet the approval of the Fire Code Official.

E. Testing and Maintenance

1. Upon completion of a new or modified fire alarm system, it shall be pre-tested by the installing technician and an acceptance test shall be performed in the presence of Fire Prevention Personnel. The request for the acceptance test shall be made via the City's inspection request system within 24-hours after completion of work (or be subject to a \$75.00 fine)*City of Lynnwood only.
2. All fire alarm systems shall be tested and maintained as per NFPA 72. Annual confidence tests shall be performed by a state licensed and NICET II certified technician. It shall be the responsibility of the building owner to ensure their contracted fire alarm service company submits all fire alarm confidence test reported to the designated service vendor (www.tegrisinc.com) for review within 14 days of completion.
3. Maintenance and repair are the responsibility of the building owner. Fire alarm systems shall be kept operational at all times. Trouble conditions shall be corrected or resolved within 24 hours. Notification shall be in writing and shall be the responsibility of the Central Station.

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